

STANFORD UNIVERSITY MEDICAL CENTER

(5-17-69)

STANFORD, CALIFORNIA 94305 • (415) 321-1200

JUL 10 1969

STANFORD UNIVERSITY SCHOOL OF MEDICINE Department of Genetics

Professor Joshua Lederberg

VD Statistics Program CDC - Public Health Service Atlanta Ga. 30333

I would be grateful to you for further information on:

VD Fact Sheet 1968: Derivation of the estimated number of untreated, infectious cases of syphilis:

Cases of primary and secondary syphilis are reportable by law in all of the 50 States and the District of Columbia. In the fiscal year ending June 30, 1968, physicians and clinics in the United States reported 20,182 cases to State or local departments of health. But the number of cases reported understates actual incidence for two reasons:

- 1. Not all cases are diagnosed, and
- 2. Not all diagnosed cases are reported.

(VD fact sheet)

The Venereal Disease Program currently estimates that the actual occurrence of syphilis was about 80,000 cases in Fiscal Year 1968 of which 20,182 were diagnosed and reported to health departments.

Cases of syphilis which occur but go untreated cumulate to form a large reservoir of cases needing treatment. This reservoir of cases needing treatment (prevalence), most of which are in the latent stage of disease and are detectable only by means of bloodtests, is currently estimated to number about 636,000.

Since writing the attached article, I have become increasingly perplaed about efforts to define the problem to better than an order of magnitude.

Do you have a mathematical model, with best estimates of the distributions, of exposures, infections, and transitions through infective states, therapy and latent states? (Are untreated cases likely to have more further contacts than the norm, etc.)

Thank you
Joshua Lederberg

My interest in this material relates in part to background for a weekly column on "Science and Man" which appears weekly in the Washington POST.